Amendments to the Claims:

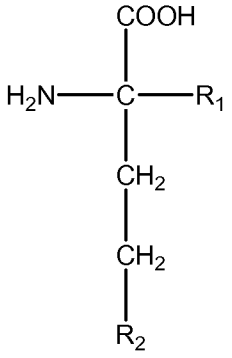
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4. (CANCELLED)

5. (CURRENTLY AMENDED) A method for treating, palliating or inhibiting mycobacterial infections in a mammal by inhibiting mycobacterial glutamine synthetase without causing substantial toxic side effects in said mammal, said method comprising the steps of:

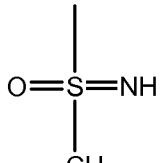
administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising a mycobacterial glutamine synthetase (MbGS) inhibitor of Formula 1; ~~and~~



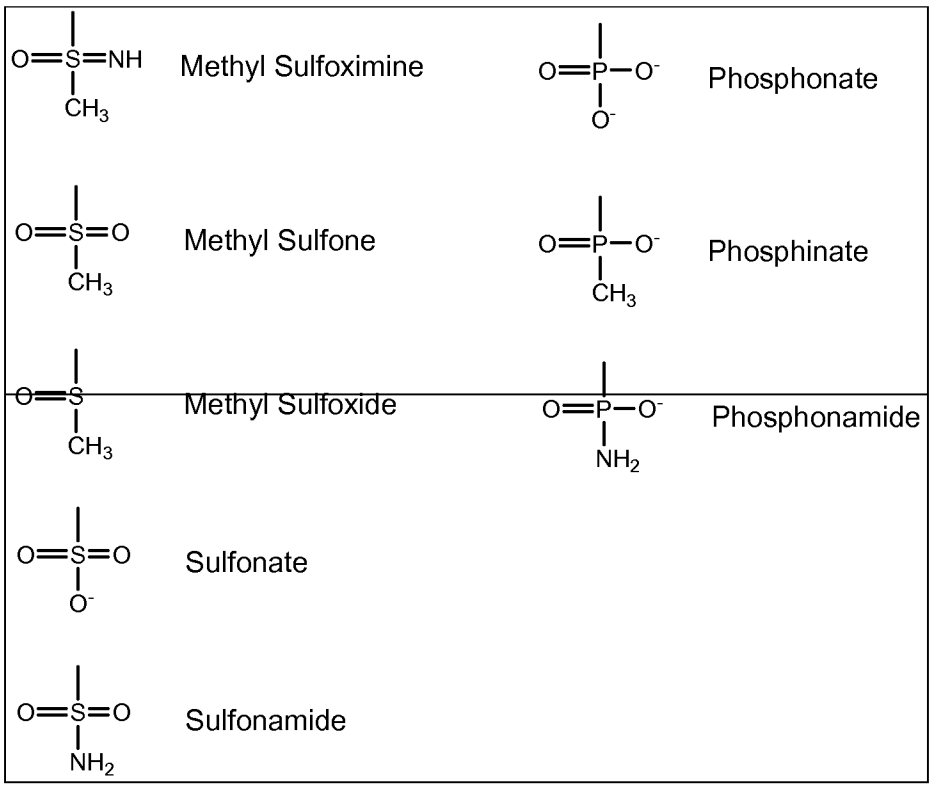
Formula 1

wherein

R_1 = branched and straight chain alkyl groups of 1 to 8 carbons; and

R_2 = ~~tetrahedral group selected from the group consisting of~~ 

(Methyl Sufoximine)~~:~~



[[ ]]; and

inhibiting the growth of a Mycobacteria species without causing substantial toxic side effects in said mammal;

wherein ~~said composition effectively inhibits mycobacterial glutamine synthetase (MbGS), but does not substantially interfere with mammalian glutamine synthetase (MGS) *in vivo* in an anti-mycobacterial effective amount such that~~ said mycobacterial infection is treated, palliated or inhibited.

6. (CANCELED)

7. (CURRENTLY AMENDED) The method for treating mycobacterial infections in a mammal according to claim 5 wherein [[R_2]] R_1 comprises branched and straight-chained alkyl groups from 2 to 4 carbons.

8-9. (CANCELED)

10. (PREVIOUSLY PRESENTED) A method for treating, palliating or inhibiting mycobacterial infections in a mammal by inhibiting mycobacterial glutamine synthetase

without causing substantial toxic side effects in said mammal, said method comprising the steps of:

administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising alpha-methyl-DL-methionine-SR-sulfoximine or alpha-ethyl-DL-methionine-SR-sulfoximine; and

inhibiting the growth of a Mycobacteria species without causing substantial toxic side effects in said mammal~~;~~

~~wherein said anti-mycobacterial composition effectively inhibits MbGS but does not substantially inhibit mammalian glutamine synthetase (MGS) *in vivo* at an anti-mycobacterial effective amount~~.

11. (ORIGINAL) The method according to claims 5 or 10 further comprising co-administering an anti-microbial effective amount of isoniazid (INH).

12. (CURRENTLY AMENDED) The method for treating, palliating or inhibiting mycobacterial infections in a mammal according to claims 5 ~~and~~ or 10 wherein said mammal is selected from the group consisting of humans, monkeys, cows, pigs, horses, rabbits, rodents, cats and dogs.

13. (CURRENTLY AMENDED) The method for treating, palliating or inhibiting mycobacterial infections in a mammal according to claims 5 ~~and~~ or 10 wherein said mycobacterial infection is caused by a member of the genus Mycobacterium selected from the group consisting of *M. tuberculosis*, *M. bovis*, *M. avium*.

14. (CANCELED)

15. (CURRENTLY AMENDED) A method for treating, palliating or inhibiting mycobacterial infections in a mammal by inhibiting mycobacterial glutamine synthetase without causing substantial toxic side effects in said mammal, said method comprising the steps of:

administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising alpha-

methyl-[[D,]]L-methionine-S[[R]]-sulfoximine (α-Me-MSO) or alpha-ethyl-[[D,]]L-methionine-S[[R]]-sulfoximine (α-Et-MSO); and

inhibiting the growth of a Mycobacteria species without causing substantial toxic side effects in said mammal~~;~~

~~wherein said anti-mycobacterial composition effectively inhibits MbGS but does not substantially inhibit mammalian glutamine synthetase (MGS) *in vivo* at an anti-mycobacterial effective amount~~.

16. (CURRENTLY AMENDED) The method according to claim [[15]] 10 wherein said anti-mycobacterial composition is alpha-methyl-L-methionine-SR-sulfoximine or alpha-ethyl-L-methionine-SR-sulfoximine.